

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the above-identified application.

1-38. (Canceled)

39. (Previously presented) An apparatus comprising:
- a light source configured to produce a coherent beam;
  - a beam splitter configured to split the coherent beam into
    - an object beam, and
    - a reference beam;
  - a material holder configured to hold a holographic recording material;
  - an object beam unit configured to
    - display a rendered image,
    - condition the object beam with the rendered image, and
    - cause the object beam to interfere with the reference beam at a location for an elemental hologram of a holographic stereogram on the holographic recording material;
  - a voxel-control lens located in a path of the object beam and positioned at a distance from the location for the elemental hologram, wherein the distance is based at least in part on
    - a focal length of the voxel-control lens, and
    - a size of the elemental hologram; and
  - a computer programmed to control a delivery of the rendered image to the object beam unit.

40. (Previously presented) The apparatus of claim 39, wherein:  
the object beam unit comprises a spatial light modulator (SLM) configured to display the rendered image; and  
the voxel-control lens has a focal length about equal to a distance between the voxel-control lens and the SLM.
41. (Previously presented) The apparatus of claim 39, wherein:  
the object beam unit comprises a SLM configured to display the rendered image; and  
the voxel-control lens has a focal length about equal to a distance between the voxel-control lens and a projected image of the SLM.
- 42-56. (Canceled)
57. (Previously presented) A method comprising:  
selecting a location for an elemental hologram of a holographic stereogram in a holographic recording medium;  
generating a coherent light beam;  
splitting the beam into  
an object beam, and  
a reference beam;  
rendering an image;  
conditioning the object beam with the rendered image, wherein the conditioning comprises  
positioning a voxel-control lens at a distance from the selected location for the elemental hologram, wherein the positioning is based at least in part on  
a focal length of the voxel-control lens, and  
a size of the elemental hologram, and

passing the object beam through the voxel-control lens; and  
interfering the conditioned object beam with the reference beam at the selected location  
for the elemental hologram.

58-64. (Canceled)

65. (Previously presented) The method of claim 57, wherein the voxel-control lens is  
positioned at a location selected to:

change the size of at least one voxel of the holographic stereogram; and  
make the rendered image, from a viewpoint of the selected location for the elemental  
hologram, appear at a greater apparent distance relative to the holographic  
recording material.

66. (Previously presented) The method of claim 57, wherein:

the conditioning comprises displaying the rendered image on a spatial light modulator  
(SLM); and

the focal length of the voxel-control lens is about equal to a distance between the voxel-  
control lens and the SLM.

67. (Previously presented) The method of claim 57, wherein:

the conditioning comprises displaying the rendered image on a spatial light modulator  
(SLM); and

the focal length of the voxel-control lens is about equal to a distance between the voxel-  
control lens and a projected image of the SLM.

68. (Currently amended) A system comprising:

**means for selecting a location for an elemental hologram of a holographic stereogram in a holographic recording medium;**

means for generating a coherent light beam;

means for splitting the beam into

an object beam, and

a reference beam;

means for rendering an image;

means for conditioning the object beam with the rendered image, comprising

**an object beam unit, wherein**

**the object beam unit is configured to position** ~~means for positioning~~ a  
voxel-control lens at a distance from ~~[[the]]~~ a selected location for  
~~[[the]]~~ **an** elemental hologram **of a holographic stereogram,**  
**[[wherein]]**

**the elemental hologram is in a holographic recording medium,**

the **distance positioning** is based at least in part on

a focal length of the voxel-control lens, and

a size of the elemental hologram, and

means for passing the object beam through the voxel-control lens; and

means for interfering the conditioned object beam with the reference beam at the selected location for the elemental hologram.

69. (Currently amended) The system of claim 68, wherein the **object beam unit means for positioning** is configured to position the voxel-control lens at a location selected to:

change the size of at least one voxel of the holographic stereogram; and  
make the rendered image, from a viewpoint of the selected location for the elemental hologram, appear at a greater apparent distance relative to the holographic recording material.

70. (Previously presented) The system of claim 68, wherein:

the means for conditioning the object beam with the rendered image comprises  
means for displaying the rendered image on a spatial light modulator (SLM); and  
the focal length of the voxel-control lens is about equal to a distance between the voxel-control lens and the SLM.

71. (Previously presented) The system of claim 68, wherein:

the means for conditioning the object beam with the rendered image comprises  
means for displaying the rendered image on a spatial light modulator (SLM); and  
the focal length of the voxel-control lens is about equal to a distance between the voxel-control lens and a projected image of the SLM.